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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,939	03/31/2004	Kenneth A. Fogelstrom	D5548	7496
30410	7590	03/24/2006	EXAMINER	
INTERNATIONAL TRUCK INTELLECTUAL PROPERTY COMPANY, 4201 WINFIELD ROAD P.O. BOX 1488 WARRENVILLE, IL 60555			FAYYAZ, NASHMIYA SAQIB	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/813,939

Applicant(s)

FOGELSTROM, KENNETH A.

Examiner

Nashmiya S. Fayyaz

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eslinger- US Patent # 6,120,107. As to claim 1, Eslinger discloses a compressed air system 10 installed on an engine 12 that powers a vehicle (not shown) including compressor 14 with governor valve 22 controlling cut-in and cut-out (loading and un-loading modes) and further including a air pressure sensor 30 located in communication with system 10 for sensing pressure and generating a signal, a source of a clock signal (timer 42) and an information processor (electronic control unit 34) connected to receive the air pressure signal

and utilizing the clock signal to compare the reservoir pressure signal 32 to a predetermined pressure signal by generating a first delta signal  $P_1$  which is represented by a pressure versus time graph as in Fig. 5 and comparing it to  $P_{max}$  which is equal to the absolute difference between the cut-in and cut-out pressures which signals the dryer to load or un-load i.e. cut-in or cut-out, see figs. 1-5 and col. 2, lines 56 et seq. Further, it is noted that Eslinger does not specifically recite "major deflection points". Eslinger does however, recite that a summation of delta P is used (col. 6, lines 22-39) which would seem to include major deflection points in the pressure readings. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have realized that since the summation includes the positive incremental pressures increases such that major deflection points would be included, as well, when determining the cut-in and cut-out pressures.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al- US Patent # 6,318,817. As to claim 1, Martin et al disclose electro-hydraulic braking systems for motor vehicles including pressure sensor 122 for sensing pressure of compressor reservoir 111, and information processor (electronic control unit ECU) for generating the operational curve of a demand-signal-based curve of pressure vs. time (Fig. 4) in which it is illustrated that the cut-in pressure where the pump starts and the cut-out pressure are found at major deflection points of the graph based on driver demand, see Fig. 4 and col.

12, lines 52 et seq. Further, it is noted that a source of a clock signal is not illustrated. However, it is noted that in order to generate the pressure vs. time plot of Fig. 4, some form of a clock signal would be required in order to obtain a time reference. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have designated a source of a clock signal in the Martin et al device since a clock or timer is required to generate the pressure vs. time signal of Fig. 4.

***Allowable Subject Matter***

5. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 4-5 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: the primary reason for allowance of the claims is that the prior art fails to teach or suggest a method of characterizing a compressed air system for a motor vehicle including the steps of obtaining air pressure readings..., determining major air pressure deflection points...utilizing recently determined...points **along with** calculating the pressure rise time between major deflection points bounding a minimum deflection point and a subsequent maximum deflection point and excluding intervening periods where pressure is

below a level of a negative turning minor deflection point; and determining a rise slope from the calculated pressure rise time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashmiya S. Fayyaz whose telephone number is 571-272-2192. The examiner can normally be reached on Mondays and Wednesdays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



NFayyaz  
Examiner  
Art Unit 2856

nf  
3/15/06



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